

REMARKS

Claims 1 and 3-20 were pending, with claims 6 and 8-15 withdrawn. Claims 1 and 16 are amended. Support for these amendments is found, in the Applicants' specification (e.g., U.S. Pat. App. Pub. 2008/0057260 A1, ¶¶[0015], [0021], and original claims 4 and 7). Claims 2, 4, 7, 18, and 20 are canceled. Thus, claims 1, 3, 5, 16, 17, and 19 are presented for examination in view of the amendments and the following remarks.

Claim Rejections – 35 USC §112

Claims 1, 3, and 7 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Although the Applicants do not concede that these claims do not comply with the written description requirement, the Applicants respectfully request reconsideration and withdrawal of this rejection of claims 1 and 3 in view of the amendment of claim 1, from which claim 3 depends. As indicated above, claim 7 is canceled.

Claim Rejections – 35 USC §102 & 35 USC §103

Claims 1, 4, and 7 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pub. No. 2003/0143423 ("McCormick") or under 35 U.S.C. §103(a) as being unpatentable over McCormick. However, McCormick has not been shown to have described or made obvious an encapsulation for an organic electronic component arranged on a substrate, wherein "a protective film covers the component at least in an area of transition from [a] capsule to the substrate, . . . wherein said protective film includes at least one thin-barrier film and has a thickness in the range of 1 nm to 500 µm," as recited in amended claim 1. As indicated above, claims 4 and 7 are canceled.

McCormick described "the use of adsorbent (desiccant and/or getter) loaded transfer adhesives to adhere an encapsulation lid to an organic electronic device (OED) as part of an encapsulation method."¹ A device 10 "is comprised of substrate 12 on which are located cathode

¹ McCormick, ¶[0004].

pad 14 and anode pad 16.”² “Dessicant-loaded transfer adhesive 22 forms a gasket around the OED structure covering its periphery, and is topped with encapsulation lid 24. Optional high barrier adhesive 26 encompasses transfer adhesive 22 and extends from substrate 12 to encapsulation lid 24.”³

As the Examiner appears to acknowledge, McCormick did not describe the thickness of the barrier adhesive 26.⁴ For at least this reason, the Applicants respectfully submit that McCormick did not describe or make obvious a thin-barrier film having a thickness in the range of 1 nm to 500 μm (in the case in which the protective film include a single thin-barrier film) or less (in the case in which the protective film includes more than one thin-barrier film). This is not a trivial distinction. For example, as the Applicants described in their specification, such thin-barrier films have the advantage of “extremely low permeation rates, thereby dramatically reducing the ingress of environmental influences such as moisture and/or oxygen.”⁵ Thus, to the extent the Examiner has taken the position that “[i]t would have been obvious to one of ordinary skill in the art to adjust the thickness of the barrier layer 26 in McCormick . . . to any particular thickness so as to provide a desired level of barrier properties for a particular end use since a change in size is generally recognized as being within the level of ordinary skill in the art,”⁶ the Applicants respectfully submit that the thickness of McCormick’s barrier adhesive 26 has not been shown to be a result effective variable to achieve low permeation rates, as recognized by the Applicants. Moreover, the Applicants further respectfully submit that a person of ordinary skill in the art would not have recognized that the thickness range of the Applicants’ claimed thin-barrier film would be particularly suitable, as recognized by the Applicants, for achieving such low permeation rates. For at least these reasons, the Applicants respectfully submit that McCormick did not describe or make obvious a “protective film [that] includes at least one thin-barrier film and has a thickness in the range of 1 nm to 500 μm ,” as recited in amended claim 1.

² *Id.* at ¶[0027].

³ *Id.*

⁴ *See, e.g.*, Office Action of November 16, 2010, pages 4-5.

⁵ U.S. Pat. App. Pub. 2008/0057260 A1, ¶[0015].

⁶ Office Action of November 16, 2010, page 5.

Claims 3 and 5 were rejected under 35 U.S.C. §103(a) as being unpatentable over McCormick in view of U.S. Pat. No. 6,710,542 ("Chun"). Chun was cited as having described a protective film that covers the entire exterior of the component or the use of a silicon nitride protective film.⁷ However, even if a person of ordinary skill in the art would have understood Chun to have taught such features, which the Applicants do not concede, Chun has not been shown to have cured the deficiencies of McCormick described above with respect to amended claim 1. For at least this reason, the Applicants respectfully submit that McCormick and Chun, alone or in any proper combination, have not been shown to form a basis of a *prima facie* case of obviousness of claims 3 and 5.

Claims 16-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 7,642,642 ("Fazzio") in view of Chun. However, Fazzio and Chun, alone or in any proper combination, have not been shown to have described or made obvious an encapsulation for an organic electronic component arranged on a substrate including "a protective film covering the component at least in an area of transition from the capsule to the substrate . . . wherein said protective film includes at least one thin-barrier film and has a thickness in the range of 1 nm to 500 μm ," as recited in amended claim 16.

Fazzio described an apparatus 40 including a device chip 20 including substrate 22.⁸ "A cap 30, including gasket 32, is bonded to the device chip 20 and the cap 30 define a hermetically sealed cavity 26."⁹ "Depending on the desired application, the gasket 32 can have thickness 37 in the order of microns or tens of microns and have a length 39 in the order of microns or tens of microns."¹⁰ "The gasket 32 is attached to the substrate 22 using bonding agent 34 such as gold."¹¹ "[I]n addition to the bonding agent 34, caulking agent 36 is used to seal the cavity 26."¹² In the cited embodiment, shown in FIG. 3A, "the caulking agent 36 caulks and envelopes

⁷ See, e.g., *id.* at page 4.

⁸ See, e.g. Fazzio, 2:56-58.

⁹ *Id.* at 2:62-66.

¹⁰ *Id.* at 3:4-7.

¹¹ *Id.* at 3:10-11.

¹² *Id.* at 3:19-20.

portions of or all of the bonding agent 34 and the gasket 32 which is a part of the cap 30.”¹³ The Applicants respectfully submit that the bonding agent 34 and the gasket 32 has not been shown to have described a protective film including a transition area to a substrate, as recited in amended claim 16.

Chun described an OLED 50 including a “sealing layer 51 . . . constructed from one or more bi-layers consisting of a layer of SiNH 52 deposited on a layer of epoxy 53 . . .”¹⁴ The sealing layer 51 can be applied around the edge of the cover plate 18 or can be applied across the top of the cover plate as well.¹⁵ Chun did not describe or make obvious a layer thickness of the epoxy or the silicon nitride layer. For reasons analogous to those described above with respect to claim 1, the recited thickness range of the protective film in amended claim 16 is not a trivial distinction.

To the extent Fazzio described his caulking agent 36 as having a thickness on the order of microns or tens of microns, Fazzio’s caulking agent envelopes his bonding agent 34 and gasket 32. Thus, the Applicants respectfully submit that a person of ordinary skill in the art would have understood the disclosed thickness of Fazzio’s caulking agent 36 to relate to only the region of the bonding agent 34 and the gasket 32, and a person of ordinary skill in the art would not have applied Chun’s sealing layer 51 in the thickness of Fazzio’s caulking agent 36 at least because Chun’s sealing layer 51 is applied on the edge of or across the top of Chun’s cover plate 18. Accordingly, the Applicants respectfully submit that Fazzio and Chun, alone or in any proper combination, have not been shown to form a basis of a *prima facie* case of obviousness of amended claim 16, which recites “a protective film covering [a] component at least in an area of transition from the capsule to the substrate . . . wherein said protective film includes at least one thin-barrier film and has a thickness in the range of 1 nm to 500 µm.”

¹³ *Id.* at 43-45.

¹⁴ Chun, 4:39-42.

¹⁵ *Id.* at 4:47-52.

CONCLUSION

All of the dependent claims are patentable for at least similar reasons as those for the claims on which they depend are patentable.

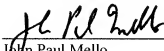
Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicants have (a) addressed certain comments of the examiner does not mean that the applicants concede other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicants concede any of the examiner's positions with respect to that claim or other claims.

Filed herewith is a Petition for Extension of Time. All fees are being paid concurrently herewith on the Electronic Filing System by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 12406-0225US1.

Respectfully submitted,

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